

# Polarization as an Emerging Source of Digital Risk

*Case Study: Spain*

How Insults, threats, and hostile language contribute to a degradation of the public conversation

## Executive Summary

In recent years, the digital public sphere has hosted not only contentious debates but also a deluge of hostile, defamatory comments that contribute to a decay in the public conversation occurring across media and social networks. As a leader in Digital Risk Protection, Constella endeavors to develop technology and deliver solutions for the anticipation, early identification, and mitigation of risks to organizations, brands, their executives, and key employees. As such, our interest in the transparency and integrity of the public digital debate, a space in which reputational and cybersecurity-related risks for individuals and organizations are emerging at breakneck speed, is paramount. [Recent reports](#) substantiate the already strong body of knowledge around the incentives for “gaming” algorithms, [driving diverse actors](#) seeking political advantage or sowing discord and disruption through the use of algorithms to digitally incentivize polarizing political movements as part of hybrid operations.

This body of research focuses on understanding the role and digital influence of politicians, civil society, and social and digital media platforms in shaping the online public debate in Spain. Public results in the Spanish language, as well as results geolocated in Spain, were collected. Specifically, Constella’s analysis sets out to measure the presence and evolution of polarization in the debate with a focus on the decay of discourse—including insults, derogatory language, and hate speech—in the debate and contributing to polarization in the conversation. Our analysis exhibits how polarization and degradation of public digital discourse are driven by three key poles: the extreme right, the extreme left, and Catalan secessionists.

This research captures a total of 37.7 million publications from 7,553 public Facebook pages that were analyzed between Q4-2017 (October 1st, 2017) and Q4-2018 (December 31st, 2018), a period of 15 months. These pages belong to Spanish organizations, media, politicians, and political parties or pages publishing in Spanish about Spanish socio-political issues. Our research tracks threats and insults on these pages in order to understand the decay of the public socio-political conversation towards hostile and derogatory speech, often characteristic of polarized political debates in which audience fragmentation is accompanied by antagonistic or confrontational language.



## Key Findings

1

### Insults and threats from across the political spectrum dominate the debate.

Out of the 37.7 million publications analyzed, 11.4% included insults or some form of derogatory language. Assessing the results over time, these types of insults and language continuously increased from 9.7% in the first month analyzed to 13.9% in the last month, reaching a 43% increase over 15 months.

2

### Mainstream and alternative media are already flooded with insults and derogatory threats by late 2017.

Initially, pages across mainstream and alternative media, as well as political parties, saw the largest penetration of insults. Some pages were also connected with politicians. In this period, insults are largely driven by events related to the Catalan secessionist movement, although hostile speech and insults penetrate the debate from across the political and ideological spectrum.

3

### Ideological extremes drive degradation of the debate, while new pages emerge alongside the changing tone of the conversation.

Over 15 months, insults and degradation of the public debate increased in proportion to the overall public debate across all pages, covering a wide swath of the political spectrum and media landscape. The political polarization was primarily concentrated on pages related to the extreme right, extreme left, and Catalan separatist movements drove increasing proportions of insults and threats, and new, politically-driven pages emerged alongside the change in the overall tone of the conversation.

## Context and Background:

In early 2019 Constella Intelligence conducted a comprehensive data analytics project with the goal of understanding the digital public debate and identifying any abnormal attempts to increase social polarization or radicalization across Europe. For this multi-stakeholder research project, our team constructed a real-time data lake consisting of more than 5 billion data points indexed from the digital public sphere. Focused on France, Germany, Poland, Italy, and Spain, insights from Constella's research received notable global and domestic media coverage, including publications from the Washington Post, the Financial Times, Bloomberg, Reuters, Politico, El País, and others.

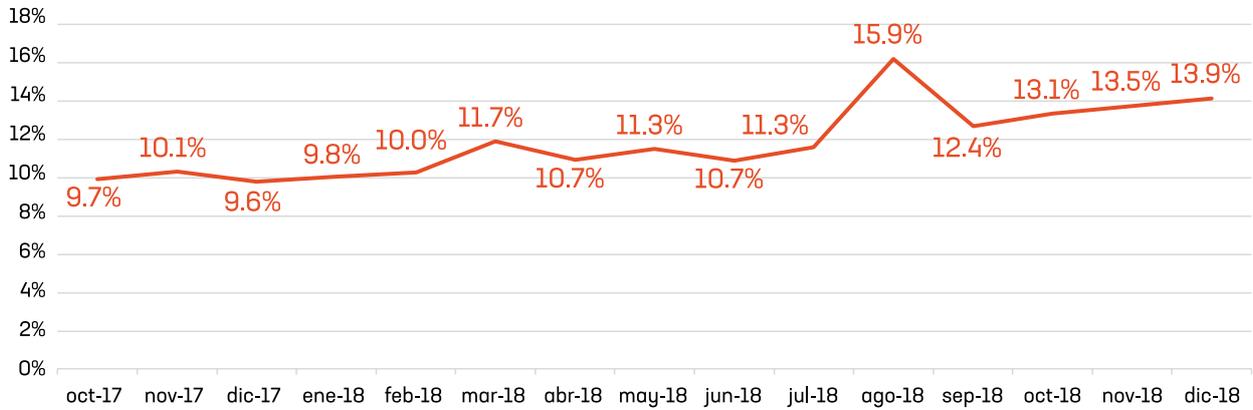
Constella's research on polarization in the Spanish digital public conversation was referenced in a [2019 piece by Anne Applebaum for the Washington Post](#) in which the Pulitzer Prize Winner assesses the political and technological conditions that enabled populist parties to gain tremendous ground across Europe and Spain at rapid velocity after 2018. This type of analysis also characterizes Anne Applebaum's 2020 book, *Twilight of Democracy: The Seductive Lure of Authoritarianism*, in which she discusses [democratic decline](#) and the social, political, and technological conditions that have accompanied the rise of authoritarianism and anti-democratic tendencies in liberal western democracies.

Expanding upon the arguments put forth by Applebaum regarding the trends and behaviors that threaten undermining democratic discourse and liberal democracy itself, Constella's team set out to conduct a retroactive analysis in order to quantify the decay of the public digital conversation in Spain between 2017 and 2018. This period is significant to recent Spanish political history and its repercussions are still notable in the socio-political discourse today. This period was notably driven by major political events [including the referendum for Catalan independence on October 1st, 2017, which was also declared illegal by Spain's constitutional court](#), and later events related to the Catalan secessionist movement. The conversation surrounding these events is also marked by the entrance of new actors in the socio-political landscape and increasing tensions across the media and political spectrum, not unlike many other European countries and western democracies during this time frame.

Constella helps public and private organizations across the globe protect themselves against digital risk, including the brand, geopolitical, and security-related threats connected with hostile speech in the online sphere. Specifically, our team of expert analysts have identified how the decay of public discourse is associated with reputational and cybersecurity-related threats to individuals, organizations, and the integrity of the public debate which is critical to the sustainability and credibility of key public institutions. Our analysis endeavors to better understand this phenomenon within the context of specific Spanish socio-political events occurring in Spain between 2017 and 2018, providing yet another valuable case study which strengthens our ability to anticipate and mitigate digital threats to organizations, executives, and their key individuals.

**FIGURE 1: GRADUAL INCREASE IN THREATS AND INSULTS IN THE ONLINE DEBATE**

Relevance of insults and threats grows during the period of analysis from 9.7% in the first month to 13.9% in the final month (43% increase in 15 months).

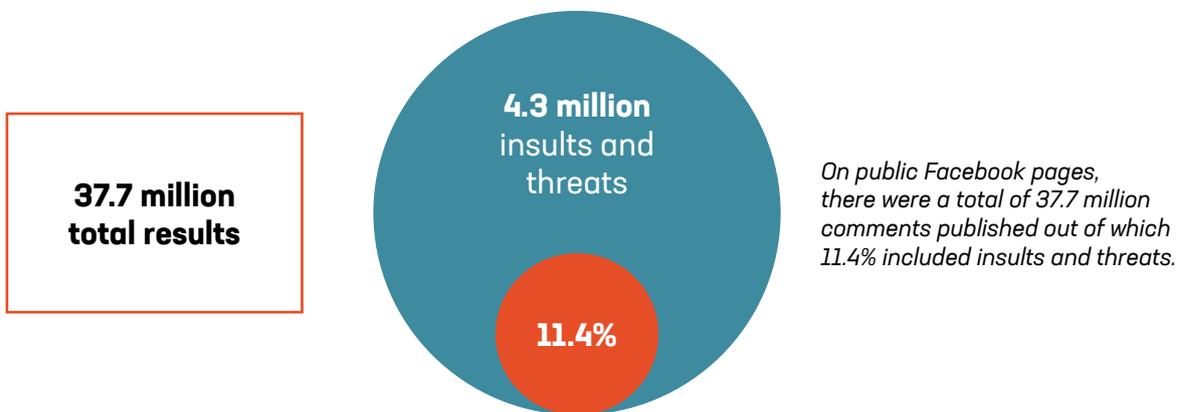


oct-17	nov-17	dic-17	ene-18	feb-18	mar-18	abr-18	may-18	jun-18	jul-18	ago-18	sep-18	oct-18	nov-18	dic-18
tonto	tonto													
hijo de puta	gentuza	hijo de puta	asesinos											
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facha	fachos	gentuza	gentuza	gentuza	gentuza	gentuza	fachos							
gilipollas	fachos	fachos	payaso	payaso	payaso	payaso	payaso	payaso	facha	facha	facha	facha	facha	puta
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payaso	sinvergüenza	fachos	fachos	fachos	fachos	fachos	facha							
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## Tracking Insults and Threats in the Online Conversation

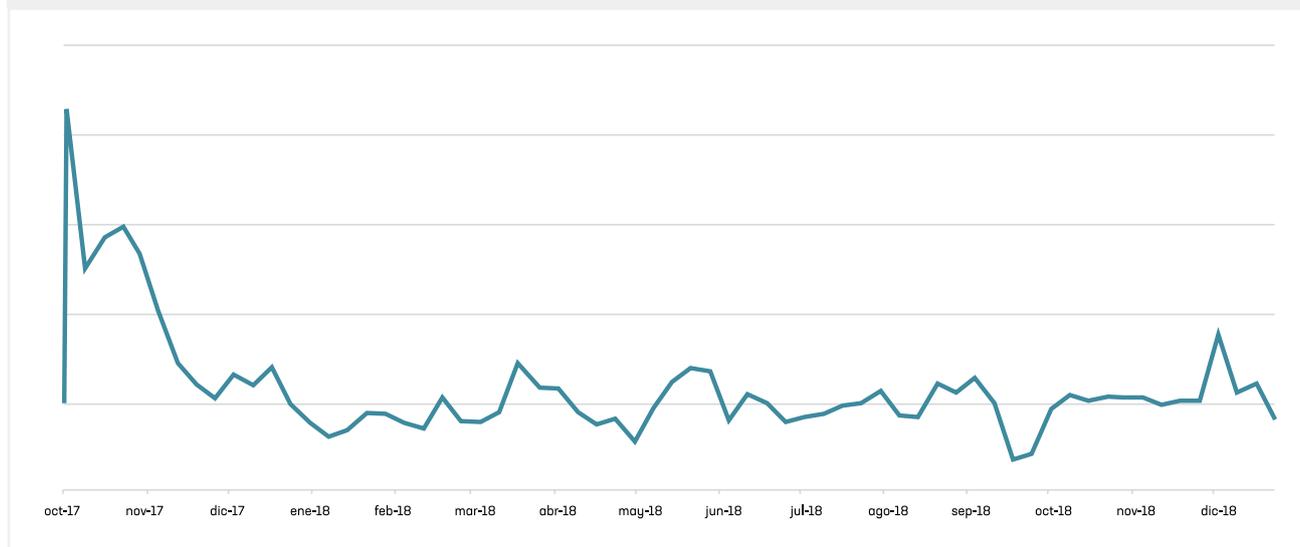
From October 1st, 2017 to December 31st, 2018 Constella analyzed a total of 37.7 million publications from 7,553 public Facebook pages belonging to Spanish organizations, media, politicians, and political parties. Pages analyzed also include those publishing in Spanish about Spanish socio-political issues. Out of the 37.7 million results analyzed over the entire period, 4.3 million (11.4%) included insults and expressions of threats or derogatory language.

**FIGURE 2: OVER 1 IN 10 COMMENTS CONTAIN DEROGATORY SPEECH**



Notably, the events that occurred in Spain on the [1st of October](#) drove significant activity in the Spanish digital conversation, as visible below in the trend line representing the volume of activity. The Catalan independence referendum of 2017, also known by the numeronym 1-O (for “1 October”) in Spanish media, was an illegal independence referendum held on 1 October 2017 in the Spanish autonomous community of Catalonia which galvanized long-standing tensions between the Spanish government and proponents of the Catalan secessionist movement.

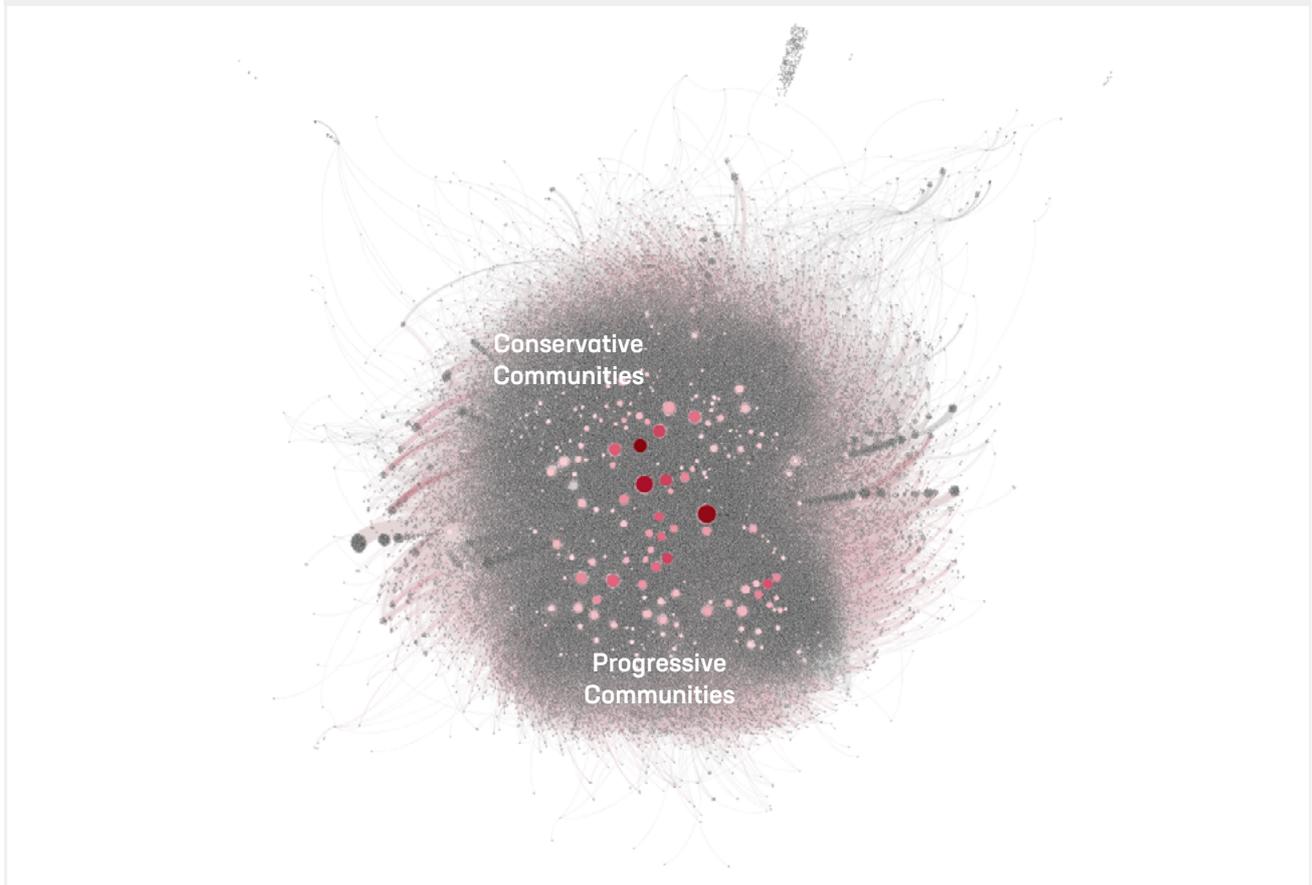
**FIGURE 3: TOTAL VOLUME REMAINS STEADY WHILE PROPORTION OF HOSTILE LANGUAGE INCREASES**



## Oct 1<sup>st</sup>, 2017 – Dec 31<sup>st</sup>, 2017: Polarizing Events Drive the Public Digital Conversation

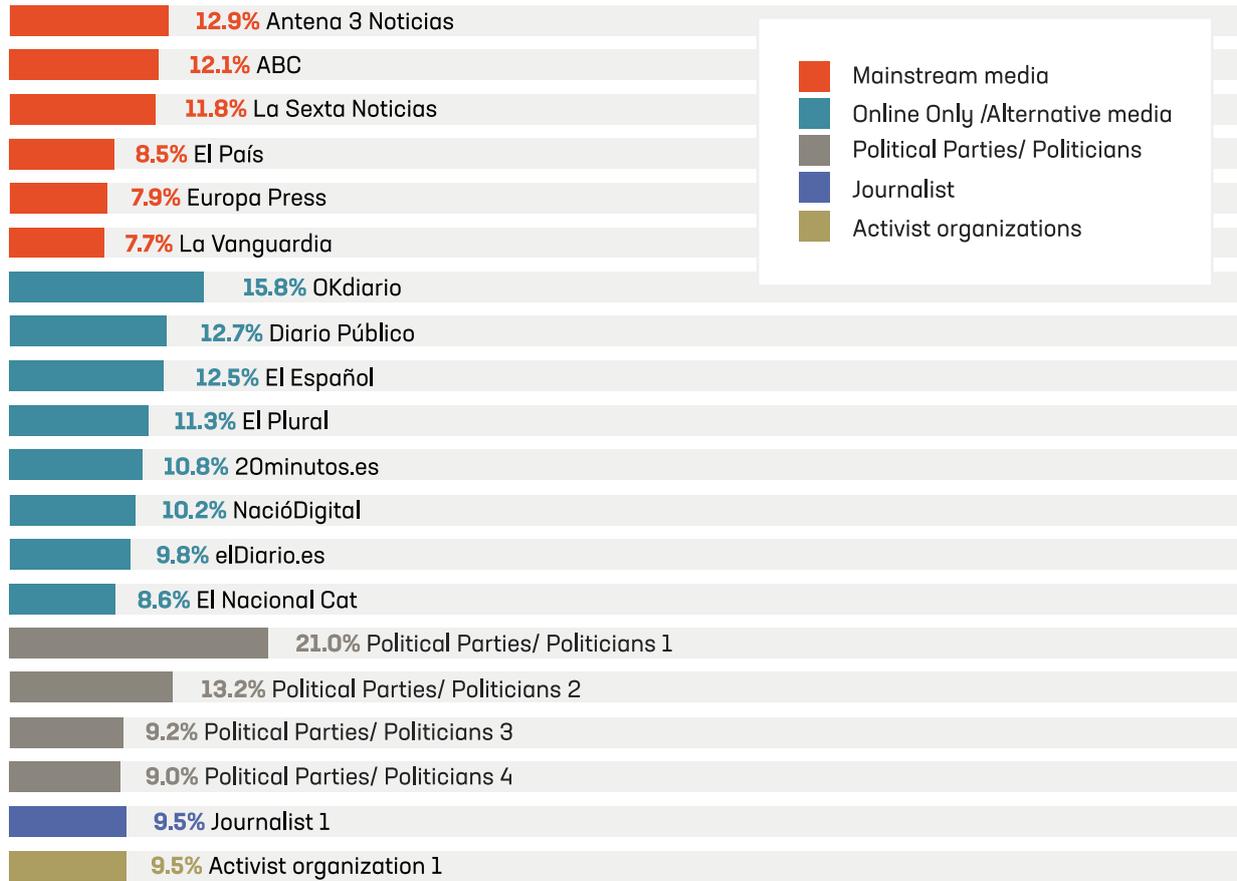
Constella’s analysts used Analyzer, Constella’s proprietary cloud-based analytics platform, to identify and build a network of public Facebook pages related to the Spanish digital socio-political conversation. Interactions were filtered on these pages in order to perform a topological analysis of public digital activity. On Facebook, we looked at five periods—by assessing public Facebook pages of political leaders, official and unofficial party pages, and political and alternative media—beginning with the last quarter of 2017 and the four following quarters of 2018. This resulted in a unimodal network of pages (giant component, edges being comments or replies). To determine the different communities and visually represent the resulting network, Constella’s data scientists applied clustering algorithms, like the Louvain Method for community detection, for example, enabling a dynamic visualization of the major communities (clusters of users) in the debate.

**FIGURE 4: BIMODAL NETWORK**  
MAINSTREAM MEDIA IS SITUATED AT THE CENTER OF THE DEBATE



In analyzing the pages that received the largest volume of total insults and threats (all greater than at least 20,000 insults over the period analyzed), mainstream and politically-driven alternative media see the largest penetration in total insults as well as insults as a proportion of the total interactions published on their pages. Notable mainstream media with over 12% of insults and threats included Antena 3 (12.9%), Onda Cero (12.5%), and ABC (12.1%). Digital-only and alternative media with a high percentage of insults and threats included Okdiario (15.8%), Diario Público (12.7%), El Español (12.5%), and Huffington Post (12.4%). Political parties and politicians yielding a high percentage of insults and threats included political profiles of figures on the far-left, in some cases garnering over 20% of insults and threats as a percentage of total activity.

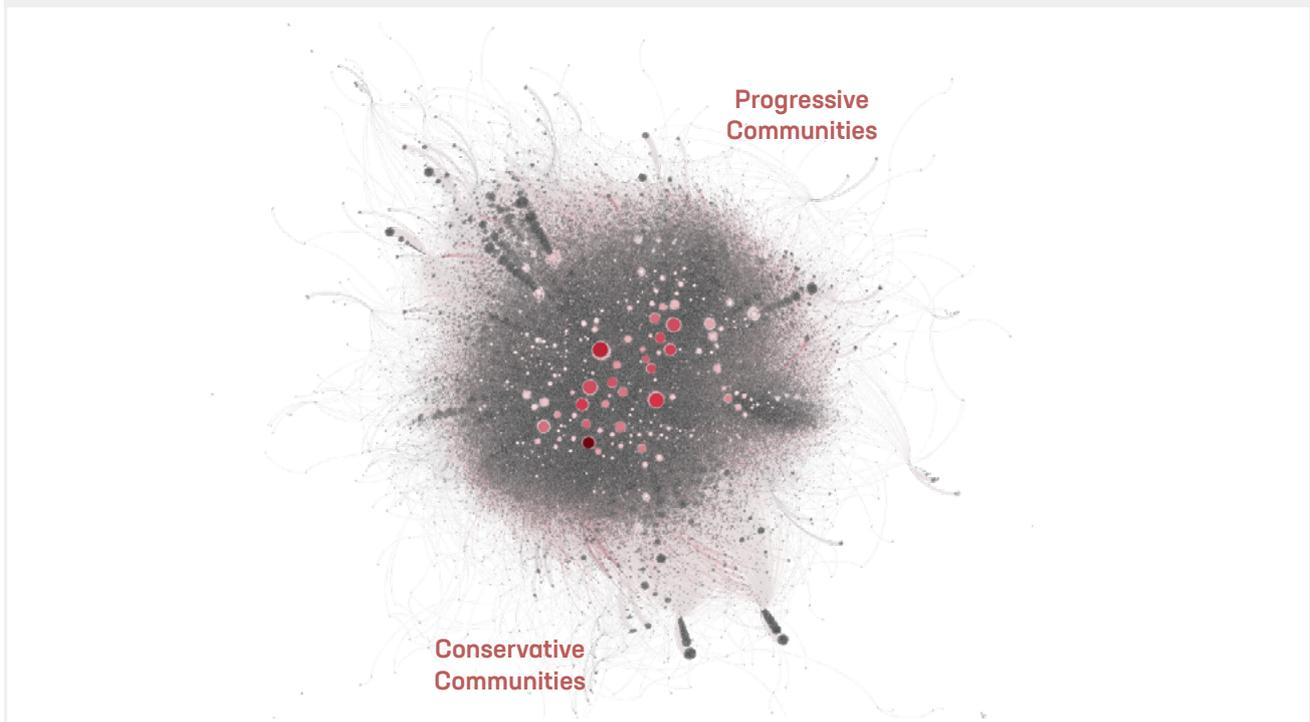
**FIGURE 5: PERCENTAGE OF INSULTS ON PUBLIC FACEBOOK PAGES (OCT 1ST, 2017 - DEC 31ST, 2017)**



*Percentage of insults out of the total comments about the socio-political situation published in such pages.*

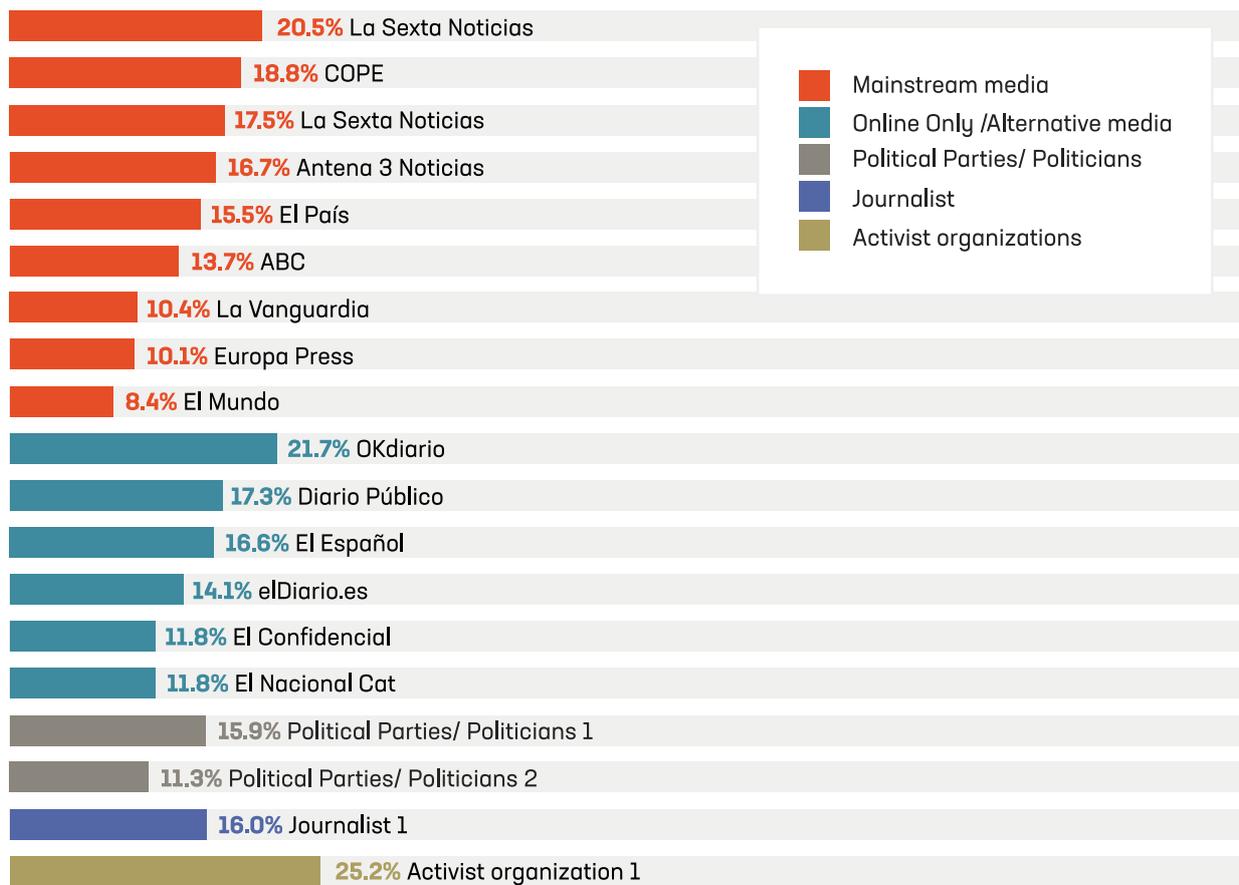
## Oct 1<sup>st</sup>, 2018 – Dec 31<sup>st</sup>, 2018: New Entrants to the Media Landscape Drive Degradation of the Debate

Insults and degradation of the public debate increased across nearly all pages with new political entrants on the far-right gaining between 15-23% of insults and threats as a percentage of total activity, while other politically-driven but independent pages on the far-left and far-right saw between 19-38% of total activity characterized by derogatory language, threats, and insults. Notably, new entrants were politically-driven in nature, garnering considerable insults as a percentage of the total comments on their pages and contributing to the socio-political fragmentation that was characteristic of the overall conversation. Additionally, the types of insults and threats most frequently used in the debate increasing in intensity throughout the period.

**FIGURE 6: PAGES DISTRIBUTED ACROSS THE SPANISH ONLINE SOCIPOLITICAL DEBATE**

The proportion of insults on mainstream media and previously established pages also increased significantly in this period. Mainstream media pages like La Sexta (+9.1%), El País (+7.0%), and COPE (+7.4%) saw notable increases in the percentage of insults and threats among the total interactions on their pages. Journalists and other independent pages saw sizable increases in the percentage of insults as a total of the interactions on their pages. Digital-only and alternative media OKdiario saw a 5.9% increase in threats and insults, while both mainstream politicians as well as politicians associated with far-left, far-right, and independentist Spanish political parties saw a similar trend, evidencing the increase in degradation of the debate emerging from multiple poles of the political spectrum. Further, the diversity of pages representing politicians and political parties, mainstream media, alternative media, individual journalists, and activist organizations is considerable, with these actors engaging in a debate characterized by increasing degradation through the intensification of threats, insults, and derogatory language used in the online socio-political conversation.

**FIGURE 7: PERCENTAGE OF INSULTS ON PUBLIC FACEBOOK PAGES (OCT 1ST, 2018 - DEC 31ST, 2018)**



Percentage of insults out of the total comments about the socio-political situation published in such pages.

## Conclusion and Outlook

Our retroactive analysis evaluating the decay of the public digital conversation in Spain from 2017 to 2018 leaves us with several key takeaways that are of direct relevance to today's digital ecosystem and the organizations, institutions, and individuals that operate within it. Constella's team is dedicated to anticipating, identifying, and mitigating digital risk for organizations, executives, and employees. Within this context, the deterioration of the public digital conversation contributes to an environment in which targeted reputational and cybersecurity-related threats to organizations and executives increase significantly.

In the case of this research specifically focusing on the Spanish digital socio-political conversation, we have demonstrated how insults, threats, and derogatory speech played a role in the fragmentation of the digital conversation among politicians, political parties, and mainstream media, among other actors, that are critical for the exchange of ideas and consensus-building in liberal democracies. As a greater volume of our vital social conversations occur in the digital sphere, the more vulnerable they become to the dynamics of the ecosystem in which they take place. As Applebaum's work emphatically asserts, the decay of important debates at the hands of disinformation, hate speech, and other online threats leveraged by diverse actors stands to jeopardize democratic discourse itself. Everyone suffers at the hands of a deteriorating public digital debate, and the trends identified in this study serve as strong evidence of the risks emerging from an increasingly hostile digital sphere in which organizations, executives, and individuals are confronted with greater risks and an increasing volume and variety of targeted threats.

# About Constella Intelligence

Constella Intelligence is a global leader in Digital Risk Protection that works in partnership with some of the world's largest organizations to safeguard what matters most and defeat digital risk. Our solutions are a unique combination of proprietary data, technology, and human expertise to anticipate, identify, and remediate targeted threats to your executives, your brand, and your assets at scale—powered by the most extensive breach and social data collection from the surface, deep and dark web on the planet, with over 100B attributes and 45 billion curated identity records spanning 125 countries and 53 languages.

To learn more about how you can proactively anticipate, identify, and remediate targeted threats to your executives, your assets and your brand visit us at [constellaintelligence.com](https://constellaintelligence.com)

## Why Constella

### OUR TEAM

We're a diverse multinational team committed to becoming the most trusted global partner for defeating digital risk. Constella integrates interdisciplinary intelligence community analysts, infosec pioneers, military veterans, and tech entrepreneurs with advanced analysis of surface, deep, and dark web to protect what matters most.

### OUR INSIGHTS

Our diverse team of expert multidisciplinary cyber intelligence analysts delivers real-time, actionable insights to identify threats and reduce risks emerging from the surface, deep, and dark web.

### OUR DIFFERENCE

Our unique technology empowers advanced analysis across the entire risk surface for superior anticipation, protecting organizations, their individuals, and their critical assets. Because, the best way to overcome future threats is by facing them today.

